

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
4 January 2001 (04.01.2001)

PCT

(10) International Publication Number  
**WO 01/00958 A1**(51) International Patent Classification<sup>7</sup>: **E06B 9/386**(81) Designated States (*national*): AT, AU, BR, CA, CH, CN, DE, DK, ES, GB, IL, IN, JP, MX, NO, PT, SE, US, ZA.

(21) International Application Number: PCT/EP00/05929

(22) International Filing Date: 26 June 2000 (26.06.2000)

(84) Designated States (*regional*): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
199 29 140.3 26 June 1999 (26.06.1999) DE  
100 18 451.0 13 April 2000 (13.04.2000) DE**Published:**

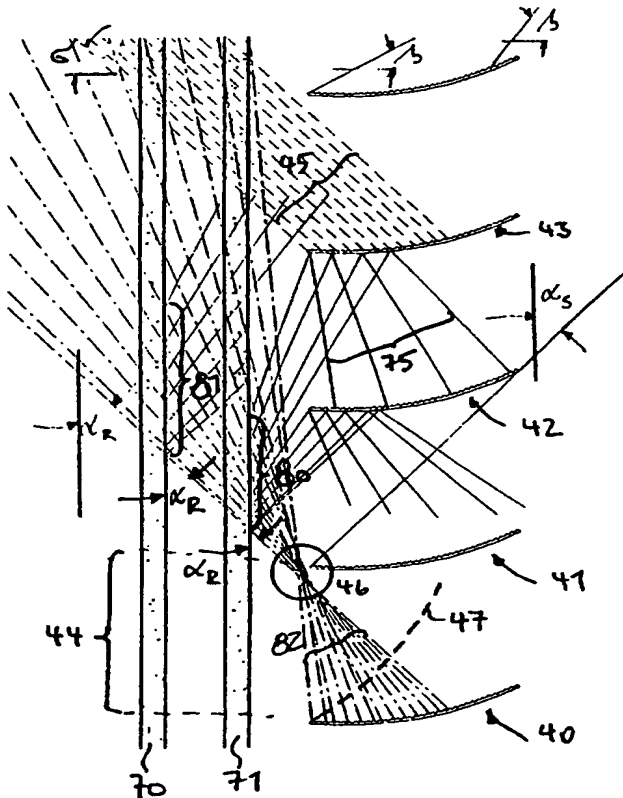
- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

(71) Applicant and

(72) Inventor: KÖSTER, Helmut [DE/DE]; Karl-Bieber-Höhe 15, D-60437 Frankfurt am Main (DE).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TOOTHED DAYLIGHT BLINDS



(57) Abstract: The invention refers to light guiding blinds having an at least partly toothed upper side for deflecting daylight in the blind portion disposed towards the irradiation area, the individual teeth showing with one side towards sun incidence and with the reverse side towards the interior space. The invention is characterized in that the tooth sides showing towards sun incidence having an angle of inclination  $\beta$  essentially smaller in the area of the irradiation cross section and larger at a larger distance from the irradiation cross section, and the angles of inclination  $\beta$  increase following a concave curve path (47) increasingly ascending from the irradiation area towards the reflection area, and at the upper side of light guiding blinds (42, 51) retro-reflected radiation (82) is concentrated and a concentration zone (46, 53) is formed near irradiation cross section (44) and the concentration zone is disposed either in front of blind (42) in the irradiation cross section and/or on the underside of upper blind (52) behind the irradiation cross section, and on the upper side of a light guiding blind (51, 41) light radiation may be reflected at the individual teeth at an angle  $\alpha_R < \alpha_S$ . The invention refers furthermore to a process for the production of the light guiding prismatic surfaces in a rotary process, wherein a pre-material is fed through a roller pair having a structured surface.

WO 01/00958 A1